Chapter 5

Integrating the evidence for a holistic approach into practice in primary care

The evidence put forward in the previous chapter is discussed to gain insight into the difficulties of weight management from the perspective of those who are obese. These findings are discussed under the headings of physical, social and emotional well-being. Having this insight is a vital ingredient for the development of a holistic, person-centred approach to obesity management and provides the basis for PNs to work in partnership with individuals. A discussion of how such an approach may be implemented in practice follows, taking into consideration the tools required, educational needs and working context of practice nurses (PNs).

5.1 The individuals’ perspectives of weight management

In this study, the emphasis has been on a person centred, holistic approach incorporating physical, social and emotional well-being. The relevance of each of these to a holistic approach to weight management is discussed in turn.

5.1.1. Physical well-being

The exploratory phase shows that physical well-being was compromised by a variety of weight related co-morbidities. The individuals selected for this study had multiple diseases that reflected those previously identified in the literature review. It seemed that over and above the impact of multiple co-morbidities related to their weight, individuals with obesity often had poor physical well-being. Weight gain was associated with a deterioration in physical well-being while individuals who lost weight were able to
reverse this trend. This study particularly highlighted the association between body pain, poor sleep and breathlessness and their relationship with functional ability which worsened with weight gain but reduced in severity with weight loss. However, these results require further research to confirm these inter-relationships in obesity although pain, sleep and mobility associations have been identified for those who had undergone coronary artery bypass surgery (Herlitz et al. 1999; Barnason et al. 2000).

5.1.1.1 Symptoms and physical well-being

The association between pain and functional difficulties may have compromised the ability of those in this study to be active and consequently offer an explanation as to why no one with osteoarthritis lost >5% of their body weight. A study looking at pain in relation to osteoarthritis found that the accompanying functional problems decreased the quality of life but that social support provided a buffer against these negative effects (Jakobsson and Hallberg 2002). However, the buffering effect for those with osteoarthritis in this study was not evident as they had low levels of support, and thus may have been less able to cope with the pain (McCull et al. 1995).

It could be that apart from any disease, weight itself affects the degree of pain experienced, as Fontaine et al. (1997) found that, compared to the general population, the obese perceived themselves to have more body pain. According to Lackner et al. (1996) it is the subjective experience of pain that is important to individuals. Roper et al. (1983) agreed with this which was reflected in their quote from McCaffery (1983): “Pain is what the patient says it is, existing when he says it does”.
Sleep disturbance is known to be associated with a number of obesity related co-morbidities already identified in this study such as arthritis, asthma, heart disease, hypertension, gastroesophageal reflux disease, sleep apnoea and depression (Calhoun 2003; Suganuma et al. 2001; Lamberg 2003). Another indication of sleep disturbance may be sleep apnoea where those affected would often snore loudly and have periods of apnoea or choking during sleep, causing sleep disturbances which resulted in daytime sleepiness. However, disturbed sleep is rarely reported by individuals and if it is, not usually followed up (Resta et al. 2003; Merritt 2000).

Another symptom closely associated with pain in those who gained weight in this study was breathlessness both of which were associated with functional ability. The Swedish Obesity Study (SOS) (Karason et al. 2000) had similar findings where weight loss resulted in a reduction of self-reported breathlessness and chest discomfort. Jones and Bell (2004) suggested incorporating activity into daily routines as a way forward for individuals with functional difficulties. These findings were corroborated by the SOS study (Karason et al. 2000) where the resulting weight loss improved functional ability.

5.1.1.2 Physical activity and functional ability

The high level of self-reported functional difficulty in this study highlights the need for individualised care, particularly in relation to physical activity. The intensity of physical activity required for weight loss has caused some debate. Some assert that to be effective it should be vigorous (Tremblay et al. 1990; Schoeller et al. 1997) while others (Hammond et al. 1997) advocate that vigorous exercise should only be prescribed in exceptional circumstances. The results of this study suggest that rather than being given an ‘ideal’ prescription for exercise, individuals should be involved in deciding what they can achieve, as changes in everyday activities are important (Owen 1994).
This was also demonstrated by Rosmond et al. (1996) where physical activity levels of men, specifically walking ($p = 0.005$) and gardening ($p = 0.013$), were inversely proportional to BMI ($p<0.001$).

Leisure-time physical activity levels differed between the three groups in the exploratory phase with those who gained weight being less active than those who lost weight. In addition, those who lost most weight were more active especially in higher intensity activities. A review, carried out by Votruba et al. (2000), on the role of activity in obesity treatment provides supporting evidence for these results. However, Votruba et al. (2000) stated that some of the studies were very intensive and not applicable to free living individuals.

Rosmond et al. (1996) also demonstrated that those who watched TV were more likely to have a higher BMI ($p<0.001$). The growth in TV ownership has been in line with the escalation in obesity prevalence (Prentice and Jebb 1995). Increasing computer usage and microchip development will undoubtedly encourage more inactive lifestyles demonstrating that assessment of inactivity is equally as important as assessing activity. The present study, however, while demonstrating that physical activity and weight change are related, also showed that even those who watched more than 40 hours of television a week could still lose weight. Although everyone watched less television, weight gainers also reduced their higher intensity activities such as swimming and cycling. This highlights the importance of individual assessment taking into account a broad range and intensity of activities.
5.1.2 Social well-being

Social support, as in other studies (Kayman et al. 1990; Klem et al. 1998), was an important factor for the individuals in this study. As in this study, Ross (1994) and later, Brown et al. (2006) found that those who were obese had higher levels of social isolation. The exploratory phase of this study identified that those who gained weight became increasingly more isolated in comparison to weight losers who actually increased their social contact. This would seem to suggest that it is not obesity per se that is associated with isolation, as the individuals in each group had a similar BMI range, but rather a case of the perception of weight gain or loss. Furthermore, weight change is influenced by social interactions both within the family and the wider social circle.

5.1.3 Emotional well-being

Emotions were demonstrated to be of importance in both phases of this research and the need to take account of them in subsequent treatment. Adolfsson et al. (2002) carried out a qualitative study of a lifestyle intervention for weight reduction and concluded that emotional well-being should be addressed. Doll et al. (2000), in a large postal survey of the general population in four English counties found that some obese people had decreased emotional well-being. However, Doll et al. (2000) also maintained that this was due to co-morbidities. The results from the exploratory phase suggested that weight loss improved emotional status and in contrast weight gain was associated with decreased emotional well-being, in particular, anger, guilt and loneliness. These same feelings were reflected in the intervention phase. Weight loss was reported to make individuals feel better about themselves. Weight gain, on the other hand, for example, created anger and guilt caused by a feeling of not being able to control weight. The
reason may have been that weight gainers internalise anger and guilt, which decreases their feelings of self-worth and results in self-loathing and isolation (Puhl and Brownell 2003b).

5.1.3.1 Stigma and emotions
The internalisation of negative feelings may have been why weight gainers in the exploratory phase had an increase in body dissatisfaction. Perhaps, women in particular, believe the messages conveyed by the media as found by Heinberg and Thompson (1995). They suggest that exposure to television commercials created greater body dissatisfaction when the ultra thin body was continually portrayed as the ideal. The rise in television viewing (Prentice and Jebb 1995) may have exacerbated the prevalence of repeated exposure. Furthermore, Stice (2002) undertook a meta-analytic review and found that high levels of internalisation were associated with eating disturbance in bulimia although it is possible that the same could apply to obesity. Similarly, women’s magazines have also been implicated in body dissatisfaction (Nemeroff et al. 1994).

Interestingly, those who lost weight, regardless of the amount, also displayed high anger levels. Their anger was associated with body dissatisfaction and guilt. It could be that in spite of their success in weight loss they continued to suffer from stigmatisation and externalised their anger towards those who they felt were displaying prejudice against them, as a coping mechanism (Puhl and Brownell 2003b). Myers and Rosen (1999) examined how the obese dealt with stigma and stated that there were differences in how individuals coped perhaps as a result of their awareness of how others viewed obesity (Brown et al. 2006). That would concur with the interpretation here where weight gainers self-criticised and isolated themselves while those who lost the most weight felt
that they had support from others which perhaps enabled them to express their emotions (Ryden et al. 2003).

5.1.3.2 Stress and negative emotions

It is estimated that 20% of the general population (Royal College of Psychiatrists 2002) have depression. Those who are obese would seem to be at higher risk of depression not only due to obesity co-morbidities but also other physical, social and emotional pressures previously highlighted. Therefore, the exploratory phase results were compared to medical inpatients in a Scottish hospital (Beausang and Syyed 1998). Both studies used the HADS to identify anxiety and depression. While findings for depression were similar (12% vs 10% male and 24% vs 24% female) anxiety levels in this study showed a marked increase particularly in females (16% vs 21 % male and 27% vs 47% female). This would indicate that anxiety levels in the obese may be higher. These results are supported by an extensive study of Swedish individuals seeking treatment for their obesity (Ryden et al. 2003). Although Wardle (2005) disputes that obese individuals are more likely to be depressed she distinguishes between those seeking treatment for their obesity and those who are not and further delineates that the strongest link with depression is body dissatisfaction. One unexpected result was the identification of the relationship between grief and weight gain and suggests the relevance of taking not only a holistic approach but also involving the individual in a person centred assessment. Further research is warranted to explore this finding in more depth.
5.1.3.3 Beliefs and emotions

One outcome, which weight gainers and losers had in common was the reduction of both hunger and cravings. This apparent anomaly could be explained by applying Weiner’s theory of attribution. It would suggest that weight gainers related hunger to cravings and reacted by increasing their food intake, resulting in weight gain. They had a strong internal belief that they were the only ones who could control their weight, which was associated with anger. They also had high levels of guilt, therefore it may be that they internalised their failure to control their weight, thus causing anger. Both anger and guilt have been associated with relapse (Grilo et al. 1989; Poston II et al. 1999). In addition, this group did not believe that weight change was due to luck and so were unable to preserve their self-esteem (Weiner et al. 1974). This in turn suggests that since expectations influence behaviours weight would continue to increase if expectations are not altered.

Weight losers, on the other hand, also reduced their hunger levels even more significantly, but they had far lower levels of guilt and anger and higher levels of positive feelings. It would appear that they internalised their success in losing weight and therefore reacted in a positive emotional way, more specifically, with raised levels of confidence and pride. These feelings are associated with higher self-esteem. Add to this, the future stable expectations of success and weight loss should continue as positive behaviours will be maintained. Further evidence for this interpretation is the fact that those who lost most weight had the highest levels of positive feelings.

In conclusion, physical, social and emotional well-being all impact on how individuals manage their weight. Emotional well-being including weight management beliefs and
expectations were seen to be of particular relevance. This suggests that weight management requires a more holistic approach than is recommended in current guidelines. Before implementing such an intervention consideration had to be given as to the most suitable mode of delivery.

5.2 Incorporating the evidence in the booklet for individuals

The aim of the booklet ‘My Personal Approach to Weight Management’, as already described in Chapter 3, was to encourage person centred, holistic care and facilitate self management. However, structured tools may compromise this aim (Mitcheson and Cowley 2002). Thus, the booklet for individuals was designed to try and avoid these pitfalls. Therefore, it was formulated to help individuals identify their own needs and work in partnership with PNs. Furthermore, it was created to encourage feedback to enhance individual empowerment (Pearson et al. 2006). The difficulty was trying to incorporate these elements while keeping it simple.

The Roper, Logan and Tierney (RLT) model facilitated the transfer of evidence into the booklet for individuals. At the macro level the holistic nature of RLT aided the incorporation of physical, psychological, sociocultural and environmental factors. At the micro level the ‘activities of daily living’, detailed previously in chapter 2, took forward the concepts of energy intake, energy expenditure, beliefs, physical, social and emotional well-being at an everyday level. One of the key areas which facilitated this was the weight management maps of the booklet for individuals to use in the intervention phase. Data from the exploratory phase was transposed into an example map to encourage individuals to view both the macro and micro picture. The purpose of providing a blank map was to aid individuals to think about their own situation and
influences on their weight, thereby being very person-centred. It also aimed to facilitate discussion for goal setting. RLT provided direction for assessment and goal setting which would appear to be an important aspect of aiding behaviour change. It also recognises that the ability to cope with change is not linear but moves back and fore on a continuum. These aspects were included in the goal setting section of the booklet.

The combination of materials (The two booklets: My Personal Approach to Weight Management and A Holistic Approach to Weight Management with the addition of various practical tools) were designed to aid PNs assist individuals in their care to achieve good weight management through a person centred, holistic approach. However, any new approach to practice requires an educational input (Furze and Pearcey 1999; Howard 1999; Freshwater 2008).

5.3 Facilitating nursing education

The researcher had an educative role in the study, which was viewed as facilitating nursing practice in obesity management. That is, learning from each other and sharing knowledge. Initially, when approaching PNs to participate in the research a brief overview of obesity was presented and the materials displayed. Feedback and discussion of who and how to recruit followed, combining both researcher and nurse perspectives. The aim was that nurses would feel empowered to implement the intervention.

The booklet ‘A Holistic Approach to Weight Management’, developed for PNs to inform their practice, sought to strike a relevant balance of breadth and depth. A variety of approaches were taken to provide knowledge, present evidence, inform practice,
stimulate reflection and yet be practical and realistic. Included in these approaches was a short list of websites. These websites were wide ranging and contained numerous links to other sites. However, it was reported that very few PNs accessed them due to lack of opportunity.

Evidence from the exploratory phase, in the form of case histories, was included as one of the activities. Two case histories were selected. One detailed the individual who gained most weight during the six-month longitudinal study and the other provided information on the individual who lost most weight. To allow the evidence to speak for itself, the case studies were the experiences of real people and not fictional characters.

Although the case studies were real people, transferring the knowledge into practice demands that the context be considered (Daly et al. 2006). During outreach visits the needs of each PN were taken into account. They were encouraged to reflect on their consultations with obese individuals as reflective practice is deemed to facilitate effective clinical practice (Benner et al. 1996; Pearson et al. 2006). This enabled the researcher to adapt to different knowledge levels and skills, rather than be prescriptive when providing ongoing education. However, these opportunities were limited due to time constraints on both the researcher and PNs.

To facilitate the transfer of knowledge into practice, practical tools were also created for PNs to use in assessment. As stated earlier, the general population is becoming heavier but current weight conversion charts do not adequately reflect this trend. Consequently, 10% weight loss charts also fail to provide sufficient information. Furthermore, tape measures for measuring waist circumference may not be long enough. However, some
tape measures are available with the risk assessment colour coded for men and women on either side of the tape. These were provided along with large sphygmomanometer cuffs. If PNs are to carry out good and accurate care they need proper tools.

5.4 Integrating the evidence into practice

The evidence was integrated into practice at both an organisational and individual level. Although there was no intention in this study to impose organisational changes within the practice context, it was considered important to view each practice holistically to have an awareness of possible influences on how nurses practised. One potential area of tension may be that the person-centred approach does not integrate easily with a possible ‘market driven’ environment of the practice (McCormack 1999). It would appear that in addition to the climate within the practice, other factors such as the role of the nurse, availability of support, education and time for research are all influential (Meijers et al. 2006). Therefore, there was a balance to be struck between the needs of the practice, the research project and those of nurses consequently negotiation and facilitation skills were important aspects of implementing the research.

For example, the researcher was very aware from past experience of the need to negotiate suitable times to visit the practices and be willing to change these arrangements at the last minute. Nurses who volunteered for the study negotiated with their practices before taking part although had the option of the researcher approaching the practice. Great care was taken not to encroach on the nurses’ domain while still being supportive. It was deemed important that the researcher be flexible in the method and times by which contact was continued with nurses to accommodate their preferences, whether it be by telephone, email or letter. To ensure its relevance in this
context, PNs were invited to participate in researching this approach as Rycroft-Malone et al. (2004) argued that “Research evidence is more powerful when it matches clinical experience” (p85).

The next chapter describes how this approach to weight management using these materials was implemented in primary care.